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LINKS BETWEEN THE INFORMAL AND FORMAL/ SEMI-FORMAL FINANCIAL SECTORS IN MALAWI

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List of abbreviations

AERC	African Economic Research Consortium
CFs	Community funds
CSAs	Co-operative Savings Associations
FFIs	Formal and semi-formal financial institutions
FFS	Formal and semi-formal financial sector
IFIs	Informal financial institutions
IFS	Informal financial sector
INDEFUND	Investment and Development Fund
READI	Rural enterprises and agro-industrial development institutions
SCAs	Savings and Credit Associations
SEDOM	Small Enterprise Development Organisation of Malawi
SMEs	Small-scale and medium-scale business enterprises
USAID	United States Agency for International Development

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I Introduction

Objectives and scope of the study

This study has two main objectives.[1] The first is to investigate complementary and competitive deposit and credit links between informal and formal/semi-formal financial sectors of the economy of Malawi. More specifically, the study examines the behaviour of lenders and borrowers under different link relationships and the impact of this on the provision of credit within the financial system. The second objective is to determine the significance of direct links between informal financial institutions (IFIs) and formal/semi-formal financial institutions (FFIs) with respect to savings mobilization and the process of financial intermediation. Drawing on the results, the study then suggests policy measures that may be adopted to further integrated development of the financial sector of the economy of Malawi.

The first objective addresses what are known as indirect deposit and credit links. These links are competitive if an increase in deposits at IFIs leads to a reduction in deposits at FFIs, and vice versa, or, if an increase in borrowing from FFIs is accompanied by a reduction in borrowing from IFIs, and vice versa. In each case, changes in the opposite direction would occur irrespective of the cause. By contrast, if an increase in deposits in one sector is accompanied by an increase in deposits in the other, or if an increase in borrowing in one sector is accompanied by an increase in borrowing in the other, then, irrespective of the type of cause, the indirect links are complementary.

Direct deposit and credit links are those that exist between informal financial sector (IFS) institutions and the formal/semi-formal financial sector (FFS) institutions.[2] Direct deposit links (e.g., with IFIs depositing funds at FFIs) would help reduce the level of idle cash balances at IFIs, while at the same time enhancing the capability of commercial banks to create money; whereas direct credit links (e.g., with credit flowing from FFFs to IFIs) would help to relieve the liquidity problem of IFIs.

In this study, these link relationships are examined with regard to all the IFIs and FFIs. But in order to minimize generality, the study focuses on money lenders (*katapila*) and savings and credit associations (SCAs) in the informal financial sector, and on commercial banks in the formal financial sector.

After a review of relevant literature, and a discussion of the database, the rest of the report is presented in three sections. Section II examines linkages in the credit market based on three link relationships: (i) a competitive scenario between the two sectors; (ii) a complementary scenario between them; and (iii) the formal sector channelling its resources through the informal sector (directly, or via the semi-formal financial sub-sector) to ultimate borrowers. Section III examines the linkage in savings mobilization, with emphasis on the potential use of deposit facilities of banks by informal savings and credit associations (SCAs). Lastly, Section IV presents a summary and explains the policy implications of the study.

Review of relevant literature

Being primarily concerned with explaining baseline information and data, the first phase of our study (Chipeta and Mkandawire, 1990) did not fully address the question of links. Beyond suggesting that credit extended by estate owners to their tenants and credit extended by employers to their employees might compete with similar credit extended by FFIs, that mobilization of financial savings by SCAs might compete with savings mobilization by formal financial institutions, and that, otherwise, credit extended by the rest of the IFIs seemed to complement credit from the FFIs, the study did not analyze these links in any detail. Furthermore, it did not consider the extent to which these links promote or limit savings mobilization and financial intermediation.

A number of recent empirical studies have either assumed or confirmed the existence of links between the IFS and the FFS. Money lenders, indigenous bankers and co-operative savings associations (CSAs), for example, are known to be depositing surplus funds with FFIs. Similarly, customers of FFIs have lines of credit with IFIs (Chandavarkar, 1990). Among other things, these links establish the channel through which credit control and monetary policies targeted at the FFS affect the volume of resources and credit in the IFS and hence the overall effectiveness of financial policies.

In pioneering econometric studies, Acharya and Madhur (1983; 1984) have demonstrated that, because of the existence of these links, changes in monetary policy produce a significant effect in the desired direction on the availability and cost of funds in India at the aggregate level. In their 1983 study, Acharya and Madhur formulated a simple model that characterized demand and supply in the IFS and FFS as well as the links between them. The model was cast in terms of a "fixed-price", "credit rationed", commercial bank credit market, and a "flexible price" informal credit market. The links between the two were established by the spill-over of excess demand from the former to the latter.

They then identified those parameters the empirical magnitudes of which are necessary for assessing the efficacy of monetary-credit policy in altering the cost of funds in the informal credit market. These parameters were estimated using annual time-series data from the Indian economy for the period 1951-52 to 1976-77. It is worth noting that the results of the model, as explained above, are crucially dependent on the existence of clients who borrow from both the IFS and the FFS.

In a different study, informal credit markets in the Republic of Korea are also said to have facilitated the working of monetary policy by transmitting signals and funds promptly. But, at the same time, they are said to have mitigated the more arbitrary and disruptive consequences of credit controls in the formal sector and thus to have contributed to the maintenance of high rates of economic growth (Cole and Park, 1983).

On the savings side, an increase in interest rates in Taiwan and the Republic of Korea that accompanied the financial reforms of the 1950s and 1960s induced an inflow of savings from the informal to the formal financial sector. In Thailand, by contrast, significant flows of savings into the informal sector occurred from time to time because of higher rates of interest on chit funds, pyramid schemes, etc. (Chandavarkar, 1990). There, the informal financial sector is accordingly seen as a vehicle for financial dis-intermediation by stimulating borrowing and lending outside the formal financial sector. Again, what may be worth noting is that shifts in funds between the two sectors must depend on the existence of clients who deposit funds in both the IFS and the FFS.

Other studies have emphasized the need to establish or strengthen existing links between the IFS and the FFS.[3] According to one authority, informal financial markets must be developed and integrated with formal financial markets so that: (i) savings in the other sectors can be lent in the more productive agricultural sector, (ii) the informal financial markets can share in the available amount of safe deficit financing through the development by the central bank of appropriate commercial and financial instruments, (iii) there can be a better allocation of financial resources between export and domestic crops and between commodities in strong demand and those in weak demand, and (iv) lenders in informal financial markets can begin to adopt some of the practices of formal financial markets, such as accepting deposits and raising additional capital outside the family enterprise (U Tun Wai, 1981). How the IFS and the FFS were to be integrated was not spelt out in this study.

Another argument for advocating integration of the IFS and the FFS is that a segmented financial market induces a loss in welfare (Quarcoo, 1979). Two different sources of welfare loss have been identified. The first arises from misallocation of credit between the FFS and the IFS. Borrowers in the two

sectors obtain credit at two different rates of interest. It is assumed that the interest rate in the IFS is higher than that in the FFS and so it constrains demand for credit compared to the FFS. If the two sectors were unified with a single rate of interest, the interest rate would rise in the FFS and fall in the IFS, reducing demand in the FFS and increasing it in the IFS. The reduction in the volume of credit in the FFS would represent a loss in welfare and the increase in the IFS would represent a gain in welfare. If the gain exceeded the loss, the difference would represent the net welfare loss before unification of the financial sector. The second source of welfare loss arises from the differential rates of return on savings between the two sectors, as a result of which there is under-consumption of financial services. According to the model developed by Quarcoo, the demand for financial services (bank deposits) is a negative function of the spread between the rate of return on informal sector loans (r) and the bank deposit rate of interest (i). The spread, r-i, represents the opportunity cost of holding financial assets. Under financial market segmentation, r-i is likely to be large, hence the demand for bank deposits will be relatively low. Integration of the two sectors is assumed to bring about a reduction in the r-i gap, making bank deposits relatively more attractive. Bank deposits, or the demand for financial services, are therefore expected to increase. The increase in the consumption of financial services, which is repressed under segmentation, is a measure of the welfare loss that results from financial sector segmentation.

Furthermore, the segmentation of the capital market, as manifested by the non-price credit rationing of the small indigenous entrepreneurs by the formal financial system, is socially non-optimal. This arises primarily from the failure by private formal financial institutions to estimate accurately the social costs and benefits of financing the small entrepreneurs' projects. It has been argued that formal financial institutions discriminate against small indigenous borrowers because they either underestimate borrower credit-worthiness or overestimate the administration, collection and risk costs of extending credit to them. In addition, private formal financial institutions do not take into account in their cost-benefit calculation the external economies that extension of credit to these borrowers would yield to the rest of the economy. Among such external economies are the potential emergence of an indigenous entrepreneurial class and the creation of opportunities for higher employment and rising standards of living of rural communities (Quarcoo, 1980).

Apart from failure to estimate accurately social costs and benefits, non-price credit rationing seems to generate other distortions in the capital market. First, the suppressed loan interest rates in the formal financial sector do not reflect the opportunity cost of capital. Instead, market forces are prevented from determining, for both formal and informal sectors, a uniform cost of capital

(with an appropriate risk premium adjustment) that would facilitate optimal allocation of society's scarce capital resources. Furthermore, the failure of the formal financial sector to earn high equilibrium rates of interest is reflected in unduly low returns to depositors. This discourages savings mobilization and limits the development of financial intermediaries (Quarcoo, 1980).

According to another contributor, reform of the whole financial system is required to reduce market dualism and achieve a uniform and integrated financial market. Such a unified financial market would be structurally efficient, implying that efficiency of the payments system and efficiency of credit allocation would be achieved (Johnston, 1968).

Financial dualism also undermines efforts by monetary authorities to design a consistent financial policy. Objectives may be difficult to define in the absence of reliable aggregate economic indicators since informal sector activities do not appear in national accounts. Tax records would provide reliable data, but the informal financial sector escapes direct taxation and so such data are not available. Moreover, regulation through credit volumes and interest rates is not efficacious when there is a considerable amount of liquidity outside the formal banking sector. The ability of borrowers to switch from the controlled formal/semi-formal to the uncontrolled informal financial markets may also impair the effectiveness of monetary policy (Germidis, 1990).

Another consequence of financial dualism is that it may adversely affect development through its effect on capital accumulation and its distribution in a developing country, and, hence, its rate of economic growth. Financial dualism creates sectoral and regional disparities as regards the mobilization and allocation of funds, e.g., rural savings are transferred to urban centres. This leads to a differential in the growth rate between sectors as their development becomes dependent on their access to different sources of credit (Germidis, 1990). Negative effects on equity result from the fact that the informal sector's clients are usually the small poorer borrowers whose sources of credit may have inadequate but high-priced resources.

In a study that suggests specific strategies for integrating domestic financial markets in LDCs (Quarcoo, 1980), the author explains that segmentation of these markets is reflected in unequal costs of capital in the IFS and the FFS. Integration of the two sectors would need unification of the cost of capital through two reform measures. One would involve the maintenance of high positive real interest rate charges on loans to small entrepreneurs and positive real interest payments on deposits and other financial assets. The other would involve decentralization of decision-making and increasing accessibility of small entrepreneurs to financial markets.

With respect to Malawi, it was suggested in the first phase of our study that one means of integrating the IFS and the FFS is to get each sector associated

with the activities of the other and to adopt appropriate techniques from the other. It was also suggested that IFIs should deposit surplus funds with FFIs and meet their requirement of extra resources if in deficit through borrowing from the FFS; and that IFIs should serve as agents of FFIs (Chipeta and Mkandawire, 1990).

While not putting forward specific strategies for integrating financial markets, it has been suggested that the means for achieving this should be consistent with the causes of financial dualism (Germidis, 1990). In so far as the IFS is a response to the deficiencies and inefficiencies of the FFS, some of the things that are required are institutional and operational reforms of the FFS. These reforms should include "informalizing" the FFS by adopting the features of the IFS to make it accessible and attractive to small-scale and medium-scale business enterprises (SMEs). But, to the extent that financial dualism is an aspect of structural dualism of the economy itself, the strategy for integrating financial markets should include measures for transforming and institutionalizing the IFS itself.

More recently, an attempt has been made to analyze the effect on the terms and conditions of loans of linkages between formal and informal lenders (Bell, 1990). Drawing on the experience of rural India, where state agencies, co-operatives and banks were established to reduce the influence of money lenders by competing with them, Bell analyzes how the welfare of the borrower is affected under four different scenarios (part of his framework is used in Section II of this study). The first scenario consists of money lenders operating in the absence of state agencies; the second involves exclusive institutional loans or institutional lenders operating in the absence of money lenders. Given these two scenarios, he attempts to establish equilibrium in the credit market with exclusive contracts using such novel concepts as the iso-expected profit curve of the money lender, the iso-expected net-income curve of the borrower, notional individual credit demand, notional supply of loans and borrower's opportunity set when dealing with banks. He considers money lenders both under conditions of monopoly and perfect competition. The result of these scenarios depends on whether institutional credit is rationed at the regulated rate of interest.

The third scenario is one of non-exclusive institutional contracts. Here, borrowing from the informal sector is considered to take place after the borrower has failed to obtain formal credit. Under this scenario, a spill-over of demand from the formal to the informal sector of the credit market will take place as long as there is rationing in the formal sector at a fixed rate of interest and lenders find it profitable to grant credit in the informal sector after screening the borrower.

In the fourth scenario, it is assumed that money lenders act as intermediaries of formal lenders. Bell explains how, in this situation, the cost of funds to the money lender will decline. The impact of this on the money lender's clients will depend on whether he is a monopolist or a perfect competitor. If he is a perfect competitor, the entire gain from the decline in the rate of interest accrues to borrowers, whereas if he is a monopolist the gain is shared between lender and borrowers. This suggests that the presence of the money lender in the credit market does not necessarily have a negative impact on the borrower. On the basis of this analysis and conclusion, Bell then stresses: (i) the need to use the knowledge of informal lenders in the FFS, (ii) the need to interlink institutional credit with the marketing of goods and supply of inputs, (iii) the need to remove restrictions on the trader-money lender, and (iv) the need to use direct measures to increase incomes in underdeveloped areas.

The database

To address the issues which are the concern of this study, we use both descriptive and analytical methods. These methods are used in explaining the direct and indirect link relationships on the savings side, as well as on the credit side. They are also used in conceptualizing observed linkages.

Primary data generated in a random sample survey of households carried out in 1989 provided the basis for assessing responses and attitudes of savers, borrowers and lenders. Most of the data presented describe the experiences of sample survey households that were interviewed in rural areas of Dowa, Lilongwe, Mangochi, Mzimba, Nkhata Bay, Rumphi and Zomba Districts and in the urban areas of Blantyre City, Mangochi Township, Mponela Township, Mzimba Boma, Mzuzu City, Nkhata Bay Boma and Rumphi Boma. In a few cases, however, data had to be estimated for the country as a whole. In this regard, estimates of the number of borrowers, lenders and savers have had to be weighted. How the weights and estimates were arrived at is explained in Annex 1. The rest of the data are presented in the text and tables.

Out of the 1,611 respondents interviewed in 1989, 1,088 stated that they were engaged in farming and/or in non-agricultural activities, while 523 stated that they were not engaged in any of these activities. For the purpose of this study, these 1,088 will be referred to as SMEs (small- and medium-scale business enterprises), and the 523 will be regarded as households. Three hundred and sixty-three SMEs (33.4 per cent of the total) saved from some of their income prior to the interview, as did 352 households (67.3 per cent) (Tables 1 and 2).

Table 1 Sums of money saved by SMEs by mode in Kwacha*

SMEs	With formal financial sector			With semi-formal financial sector			With informal financial sector			Total		
	Number	Total amount	Av. amount	Number	Total amount	Av. amount	Number	Total amount	Av. amount	Number	Total amount	Av. amount
Those combining FFS and IFS	65	52,033	800	4	1,183	296	69	16,905	245	69	70,111	1,016
Those using FFS only	129	173,785	1,460	3	2,664	888	-	-	-	132	176,449	1,446
Those using IFS only	-	-	-	-	-	-	162	8,081	50	162	8,081	50
Total	194	225,808	1,164	7	3,847	549	231	24,986	108	363	254,641	701

* Based on the 1989 survey

Table 2 Sums of money saved by households by mode in Kwacha *

Households	With formal financial sector			With semi-formal financial sector			With informal financial sector			Total		
	Number	Total amount	Av. amount	Number	Total amount	Av. amount	Number	Total amount	Av. amount	Number	Total amount	Av. amount
Those combining FFF and IFS	47	39,083	831	4	210	53	51	1,258	25	51	40,551	795
Those using FFS only	154	74,441	483	6	233	39	-	-	-	160	74,674	467
Those using IFS only	-	-	-	-	-	-	141	3,802	27	141	3,802	27
Total	201	113,524	565	10	443	44	192	5,060	26	352	119,027	338

* Based on the 1989 survey

In terms of numbers of savers, the single largest number of SMEs (162, or 44.6 per cent) saved with the IFS only. Those that used the formal sector in combination with the semi-formal sector (132) are the second largest category. Last is the number that combined the FFS and the IFS (69) (Table 1). However, the data entered in the last row of Table 1 indicate that the formal sector is the largest depository of financial savings.

The above pattern more or less repeats itself with respect to households. As the data in Table 2 show, the formal sector is again the largest depository of savings and the informal sector is the second largest. The only difference is that here the number using the IFS only (141) is not the single largest.

Five hundred and eighty-five SMEs (53.8 per cent of the total) obtained credit from various sources prior to the survey, while out of the 523, 313 (59.8 per cent) obtained credit (Tables 3 and 4). In terms of numbers of SMEs and sums borrowed, the informal sector was the single largest source of credit. It was followed by the semi-formal sector in terms of numbers and in terms of the amount borrowed by the formal sector. For households, the informal sector as a source of credit exceeded the other sectors by large factors (Table 4). In the case of SMEs and households, the number that used both the FFS and the IFS (i.e., formal, semi-formal and informal) are the smallest. The sums of money borrowed are also the smallest (Tables 3 and 4).

Table 3 Sums of money borrowed by SMEs by source in Kwacha *

SMEs	From formal financial sector			From semi-formal financial sector			From informal financial sector			Total		
	Number	Total amount	Av. amount	Number	Total amount	Av. amount	Number	Total amount	Av. amount	Number	Total amount	Av. amount
Those combining FFS and IFS	16	76,190	4,762	24	11,800	492	39	4,006	102	40	91,996	2,300
Those using FFS only	19	128,508	6,764	31	20,232	653	-	-	-	50	148,740	2,975
Those using IFS only	-	-	-	-	-	-	495	207,355	419	495	207,355	419
Total	35	204,698	5,848	55	32,032	582	534	211,361	396	585	448,091	766

* Based on the 1989 survey

Table 4 Sums of money borrowed by households by source in Kwacha*

Households	From formal financial sector			From semi-formal financial sector			From informal financial sector			
	Number	Total amount	Av. amount	Number	Total amount	Av. amount	Number	Total amount	Av. amount	Numb
Those combining FFS and IFS	8	20,758	2595	5	8,048	1,610	12	221	18	1
Those using FFS only	9	33,880	3764	8	2,115	264	-	-	-	1
Those using IFS only	-	-	-	-	-	-	284	504,431	1,776	28
Total	17	54,638	3214	13	10,163	782	296	504,652	1,705	31

* Based on the 1989 survey

Spill-over into the IFS, especially into the money lenders' segment, is not a popular way of financing SMEs. In the survey of 1986, out of 1,005 entrepreneurs who had sought credit for the start-up of their businesses, only 149 obtained credit from the IFS as against 844 who used their own resources. Only three obtained credit from money lenders. For the expansion of their businesses, 726 had approached creditors. Of these, only 24 had obtained credit from the IFS as against 696 who relied on their own resources. SMEs that are likely to borrow from money lenders are those engaged in trading with a high rate of turnover or in farming where small seasonal loans are required. Such credit is resorted to when no other options are available to the borrower.

Turning to the issue of complementary links, as stated above, a complementary credit link between the IFS and the FFS exists when growth in demand for credit from one sector is accompanied by an increase in demand for credit from the other sector. In essence, this means that, as an example, an increase in capital formation that is financed by FFS credit creates additional productive capacity that can be utilized only with IFS credit in order to maintain the economy at an equilibrium level (Aryeetey, 1991). Assuming, as new structuralists do, that the IFS is the provider of residual financing, it is asserted that the joint impact on the economy of credit from the two sectors will depend on the relative amount of credit from the IFS. Considered to be additional finance in excess of what comes from the FFS, an increase in demand for credit from the IFS is thus seen to be created by increasing use of FFS credit.

The data presented in Table 5 do not provide much evidence of the existence of complementarity between FFS credit and IFS credit. For SMEs using both the FFS and the IFS, the average sum borrowed from the latter does not seem to rise or fall in relation to the average sum borrowed from the former, except when we look at credit obtained by vendors, using the averages in the first row as the base. We arrive at the same result whether we compare informal with formal credit, or informal with semi-formal credit. We also arrive at the same result if we compare the total average sums in the last column of Table 5 with the average sums received in credit from the informal sector. It is worth noting that, taking into consideration credit extended to households, using both sectors does not make any difference. If anything, the average sums obtained from one sector are inversely related to average sums from the other.

For SMEs combining the FFS and the IFS, again using the average figures in the first row as the base, average semi-formal credit does not generally seem to rise or fall across sectors along with formal credit, with the exception of the smallholder farm sector. And for SMEs that obtained credit only from the FFS, using the average sums in the first row as the numeraire reveals that the

average sums borrowed from the formal sector do not generally rise or fall with average sums borrowed from the semi-formal sector. Comparing average sums borrowed by the household sector from the formal and the semi-formal sector also reveals the existence of competitiveness rather than complementarity.

This lack of complementarity in credit implies that SMEs do not obtain sufficient credit from the IFS to supplement credit from the FFS credit. It also explains why the majority of SMEs finance the expansion of their businesses out of their own resources generated from employment, in farming and in business (Malawi/USAID, 1987). In the 1991 survey of a sub-sample of SMEs, 29 per cent used their own resources if they did not obtain sufficient credit. Selling cattle and motor vehicles to raise finance was resorted to by 15 per cent. Another 15 per cent continued to pursue creditors, and only 7.6 per cent reported scaling down their business operations.

Whether using income from one source to finance operations in another activity will bring about a net increase in the income of the entrepreneur will depend on the relative productivity of the subsidized activity. Not much can be said about the experience of our sample SMEs since the data on which an assessment could be made were not gathered.

The procedure which we applied to data in Table 5 to assess whether there is complementarity in credit has also been applied to data in Table 6 to determine if there is complementarity in deposits. For SMEs combining the FFS and the IFS, there is little evidence of complementarity in savings between the formal and informal sectors or between the formal and the semi-formal sectors. For SMEs and households that used only the FFS, there is evidence of complementarity between the formal and semi-formal sector.

An intermediary role for money lenders

As stated above, Bell asserts that if a money lender is granted access to low-cost FFS credit, this should lower the cost of funds to him regardless of the market structure under which he operates. This benefit will then be passed on to his borrowers in the form of lower interest charges on loans. If the money lender is a perfect competitor and the marginal cost is constant, borrowers reap the whole gain from a lower interest rate. If the money lender is a monopolist and borrowers can exercise an active threat of strategic default, the gain will be shared between the money lender and borrowers. On the basis of this analysis, it is concluded that if many money lenders had access to FFS credit, the gain to the economy as a whole would be large.

But, unfortunately, in Malawi, as in India (Bell, 1990), Ghana (Aryeetey, 1991), and possibly other less developed countries, the access of money lenders to FFS credit is limited. Out of 64 money lenders who were interviewed in the 1989 country-wide survey, only 10, or 15.6 per cent, reported that they had recently obtained loans from the FFS that totalled K1.1 million. Six of them had obtained credit from the smallholder agricultural credit scheme amounting to K0.6 million. This credit is granted in the form of farm inputs and is, therefore, not available for on-lending to borrowers. The remainder, K0.5 million, was borrowed from commercial banks, the Mercantile Credit Limited and other formal sources. Since money lenders are involved in other types of business and have families to take care of, part of this credit could have been used for activities other than money lending. Two of the money lenders who borrowed from the FFS also borrowed from the IFS. Then there were 20 (31.2 per cent) of the money lenders who borrowed a larger sum of K1.2 million, all from the IFS. However, the fact that during the same period money lenders failed to meet a credit demand of K1.1 million is an indication that the credit that they received from either sector was not enough.[5]

Just as it is difficult to ascertain from the survey data whether part of the credit received by money lenders was on-lent to borrowers, so it is difficult to ascertain whether the on-lending of funds, if any took place, led to a reduction in the rate of interest charged to borrowers. Equally difficult to determine is whether the gain accrued to borrowers only, or was shared between money lenders and borrowers.

The access of money lenders to commercial banks as sources of credit may have been facilitated by their savings link with these FFIs. The number of money lenders operating in 1989 has been estimated at 36,380 from the main survey data. Out of these 11,400 (31.5 per cent) deposited money at FFIs and 6,821 (18.75 per cent) deposited money at commercial banks in the month prior to the survey. With average deposits of K382.95 and K556.08, the total sums deposited amounted to K4.4 million and K3.1 million, respectively. The bulk of the estimated remainder of K0.6 million was deposited at the Post Office Savings Bank. On balance, therefore, money lenders are net creditors of the FFS.

III Links through savings mobilization

Savings patterns of SCAs

Each member of the SCA contributes a fixed amount of money at the beginning of the school year, the amount varying from SCA to SCA. The amount is payable in a specified maximum number of months. If a member fails to contribute the full amount, the shortfall is subtracted from the portion he is supposed to receive when the fund is distributed to the members when it is temporarily wound up.

A major aim is to build up as much money as possible, through interest paid on borrowings, for distribution to members when the fund is wound up. Therefore, money in the fund is always lent out to members and little or nothing is kept by the treasurer. Consequently, there are occasions when members who do not really need loans are required to borrow the balance left after other members have received their allocations. In some cases such involuntary borrowings have been used by members to on-lend to outsiders, especially those who may have found other sources of credit more expensive or have no access to any other source of credit. Generally, such borrowing by a member to assist an outsider is allowed as long as the credit requirements of members have been satisfied.

The amount a member is allowed to borrow per month is expected not to be in excess of his monthly salary, which sets an upper limit on his known debt-servicing capacity since the standard credit period is one month. Loans are supposed to be repaid together with interest immediately after borrowers have received their monthly salaries, but the treasurer disburses new loans a day or more after pay day in order to give himself time to receive payments of maturing loans and interest charges on them, out of which new loans are made. If a borrower fails to extinguish his debt voluntarily over a reasonable number of months, the extinction is involuntarily effected by deduction from his salary.

The number of respondents who reported taking part in SCAs was 142, or 8.8 per cent of the total. The size of the SCAs ranged from two to 250 people,

with a mean for the whole sample of 38.5 (urban mean 34.8 and rural mean 40.7). The oldest SCA was formed in 1964. Fifty per cent of the respondents stated that their SCAs were formed so that they could have a source of loans; 30 per cent said that they were formed to earn money for members; while 13 per cent cited saving as the motive for establishing SCAs.

Most of the SCAs are formed by workmates (48 per cent) and neighbours (35 per cent). This makes it easy to establish and maintain contact. There are only a few between friends (3 per cent), relatives (5 per cent), and business colleagues (6 per cent).

Eighty per cent of the respondents stated that their SCAs were run by a committee, 13 per cent by a leader, and 5 per cent by all members. Employment earnings (51 per cent of the cases) and farming (35 per cent of the cases) were the most popular sources of money contributed to the SCAs.

SCAs have few options with regard to what they can do with deposits mobilized from their members, who totalled 72,905 in 1988/89. Most of the funds are lent out to members (credit to members in 1988/89 amounted to K16.4 million). If resources permit, part of the balance may be loaned to non-members (loans to non-members in 1988/89 amounted to K1.4 million). The unutilized balances are relatively small during the early part of the life of each fund (Tables 7 and 8). During this period, the demand for credit is large relative to supply of loanable funds. Among teachers' SCAs, where the life cycle of each fund runs from October (when schools open) to July (when schools close), for example, the early phase of each fund coincides with heavy demand for credit to finance school fees, the purchase of farm inputs and the purchase of other items that members could not afford during the school holidays. In fact, some SCA members even withhold their own contributions to prevent them from passing into the hands of other borrowers. Towards the end of the fund's life cycle, most of these needs have been met. As a result, demand for credit experiences a relative decline, and idle cash balances rise, reaching a peak during the final month (Tables 7 and 8) when the emphasis is on receiving repayments pending the distribution of the accumulated fund to members.

The data in Table 7 have been put together after a thorough examination of the records of a number of teachers' SCAs in Blantyre and Zomba. The unused balances for each selected SCA have been entered in a separate column. In all cases, the unused balance is zero during the first few months of the fund. In most of the cases, positive balances do not start appearing until February to March, after which they rise gradually. The size of the final floating balance, which varies directly with the number of members and the volume of transactions, can be particularly large.

Table 7 Unlent balances of six SCAs operating on a one-year basis in Kwacha

	August 1990 to July 1991[1]			October 1990 to July 1991[2]			October 1990 to July 1991[3]		
1990	Aug	0.00							
	Sep	0.00							
	Oct	0.00	1990	Oct	0.00	1990	Oct	0.00
	Nov	0.00		Nov	0.00		Nov	0.00
	Dec	0.00		Dec	0.00		Dec	0.00
1991	Jan	0.00	1991	Jan	0.00	1991	Jan	0.00
	Feb	53.03		Feb	0.00		Feb	0.00
	Mar	207.63		Mar	50.00		Mar	50.00
	Apr	470.65		Apr	100.00		Apr	105.00
	May	905.72		May	200.00		May	156.00
	Jun	1,000.00		Jun	330.00		Jun	205.00
	Jul	3,200.00[7]		Jul	2,000.00		Jul	600.00[7]

Table 7 cont ...

	October 1988 to July 1989[4]			October 1990 to July 1991[5]			September 1987 to July 1988[6]		
							1987	Sep	0.00
1988	Oct	0.00	1990	Oct	0.00			Oct	0.00
	Nov	0.00		Nov	0.00			Nov	0.00
	Dec	8.20		Dec	0.00			Dec	0.00
1989	Jan	15.00	1991	Jan	0.00		1988	Jan	0.83
	Feb	27.00		Feb	5.20			Feb	0.00
	Mar	11.80		Mar	32.00			Mar	0.00
	Apr	1.66		Apr	0.00			Apr	10.57
	May	36.40		May	55.00			May	1,888.60
	Jun	20.20		Jun	900.00			Jun	2,850.63
	Jul	1,074.40[8]		Jul	3,824.00[7]			Jul	5,665.98[8]

[1] Membership 8 ladies; contribution K40.00 per member at the beginning; interest charge on loans 30% per month.
[2] Membership 9 ladies; contribution K50.00 per month; interest charge on loans 25% per month.
[3] Membership 5 reduced to 3 ladies; contribution K50.00 as above in 1; interest charge 25% per month.
[4] Membership 10; contribution K5.00 per member per month; interest charge 20% per month.
[5] Membership 16 ladies; contribution K50.00 as above in 1; interest rate 20% per month.
[6] Membership 38; contribution K37.24 as above in 1; interest rate 20% per month.
[7] Forecast balance.
[8] Actual balance.

Table 8 Unlent balances of an SCA operating on a two-year cycle basis in Kwacha

	May 1985 to May 1987		June 1987 to May 1989		June 1989 to April 1991	
1985	May	10.00				
	Jun	11.00	1987 Jun	0.00	1989 Jun	24.48
	Jul	20.00	Jul	21.80	Jul	1.35
	Aug	20.30	Aug	15.70	Aug	38.35
	Sep	18.80	Sep	34.40	Sep	21.35
	Oct	40.80	Oct	10.60	Oct	36.55
	Nov	27.10	Nov	19.50	Nov	30.05
	Dec	13.20	Dec	3.70	Dec	35.05
1986	Jan	25.40	1988 Jan	3.25	1990 Jan	9.65
	Feb	12.40	Feb	12.45	Feb	13.95
	Mar	8.80	Mar	60.06	Mar	52.45
	Apr	22.50	Apr	19.75	Apr	42.95
	May	7.55	May	25.55	May	45.39
	Jun	50.45	Jun	30.90	Jun	21.26
	Jul	66.35	Jul	54.00	Jul	23.28
	Aug	64.85	Aug	261.56	Aug	16.88
	Sep	216.85	Sep	226.46	Sep	32.48
	Oct	154.35	Oct	119.86	Oct	35.88
	Nov	41.65	Nov	77.46	Nov	29.13
	Dec	110.65	Dec	74.36	Dec	142.23

Table 8 cont ...

1987	Jan	90.65	1989 Jan	32.26	1991 Jan	29.42
	Feb	168.35	Feb	52.36	Feb	23.82
	Mar	133.65	Mar	58.96	Mar	256.48
	Apr	143.65	Apr	67.76	Apr	10.68
	May	200.45	May	221.06	May	1,003.76[2]
	Jun	835.15[2]	Jun	802.96[2]		

[1] Membership varied between 7 and 10; contribution K5 at the beginning and K1 per month per member thereafter; interest charge 10 % per month.

[2] End of cycle balance pending distribution of principal and interest among members.

Table 8 has data on idle balances that have been extracted from the records of an SCA whose members belong to a different profession. All these members work for the same establishment in Zomba. Their number has varied between seven and ten since the SCA was formed in 1985. As this SCA operates on the basis of a two-year cycle, the data in the table cover a much longer period than those in Table 7. The pattern here is different in that balances can occur from the very beginning of the fund's cycle, but they too seem to rise as the fund nears the end of its life, for the reasons given above. And again, the floating balance, whose lifetime is now much shorter, tends to be relatively large compared to other idle balances.

It is out of these idle cash balances that SCAs may make deposits at commercial banks. In the main survey, details of how SCAs banked their resources were not solicited. According to a 1990 survey of a sub-sample of 30 SCAs, only seven (or 23 per cent) deposited money at FFIs. Of these, 57 per cent made use of commercial banks and 43 per cent made use of the Post Office Savings Bank. The main motive for depositing resources at these institutions was safety or security rather than interest income, since interest rates there are much lower than those that SCAs earn from the credit that they extend. The few SCAs that deposited their funds at banks did so for a short period, usually a month or two when lending to members stopped or was curtailed pending the distribution of the principal and interest among members. Otherwise SCAs rarely deposited balances. The usual practice was for the treasurer or some other SCA official to hold on to unlent balances in case there was an unanticipated demand for credit from members. The problem was how to estimate the likely extent of such unanticipated demand so that SCAs did not have to carry large idle cash balances.

Although the deposit of surplus funds by SCAs is by a small number of those IFIs, it does serve a number of useful purposes. First, it enhances opportunities for financial intermediation by FFIs during the March to September season when their own liquidity comes under strain. Second, it offers a safe haven for SCA funds. Third, it enables SCAs to earn extra interest income for their members. Fourth, by reducing the number of people who queue up at banks to make deposits and withdrawals, the practice helps to cut down the cost to banks of mobilizing savings. The potential for increasing these gains to the economy is large considering that there are about 2,000 SCAs in Malawi.

IV Summary and policy implications of the study

Using both descriptive and analytical techniques, this study has attempted to investigate direct and indirect linkages between the informal and formal/semi-formal financial sectors in the economy of Malawi. The study has covered both credit allocation and savings mobilization. From the investigation, the following observations and conclusions have been drawn:

1. The segmentation of the IFS and the FFS in the economy of Malawi is large, but it is not complete, either in credit allocation or in savings mobilization. Both indirect and direct credit and deposit links exist. The indirect credit and deposit linkages are significant. The direct credit links are insignificant, but the direct deposit links with money lenders are significant.

2. Indirect credit linkages are largely competitive as regards SMEs. With respect to households, they are also competitive. In both respects, the lack of complementarity in credit implies that insufficient credit is obtained from the IFS to supplement FFS credit. Concerning deposit links, those relating to SMEs that deal with both the IFS and the FFS are competitive, while those relating to SMEs that use only the FFS, and to households, are complementary as between formal and semi-formal sectors. In the former case, those that choose to save with the IFS because of high interest rates do not save much with the FFS. In the latter case, there is no interest differential between the formal and the semi-formal sub-sectors. Those who save with the formal sub-sector also save with the semi-formal sub-sector to benefit from the non-interest advantage of this sub-sector.

3. The intermediary credit role of the IFS between borrowers and the FFS is not significant. As a result, there is little competition between IFIs and FFIs in the delivery of credit. Furthermore, credit from both the IFS and the FFS to SMEs is insufficient. Making more credit available to these enterprises by both the IFS and the FFS must remain a matter of priority in policy-making. For the IFS, an improved ability to lend should come from

increases in wage, farm and business incomes, as these are the main sources of funds for lending. Funds can also come from FFIs for on-lending to ultimate SME borrowers. One commercial bank has recently made a grant of K0.25 million to SEDOM for on-lending to such borrowers. If SEDOM can stop restricting lending to manufacturing SMEs and begin lending to IFIs, an important channel would be opened for transmitting FFS funds through the IFS. For the FFS, an improved ability to lend should come from greater preparedness to assume credit risks and from adoption of appropriate methods of SME risk assessment and management.

4. The limited amount of competition between the IFS and the FFS has another unfavourable implication. It is that the opportunities open to borrowers are themselves limited, and, hence, they are not able to improve their welfare by freely negotiating on the two credit markets for the best terms and conditions.

5. Concerning resource mobilization, few of the savings handled by commercial banks and other FFIs are initially mobilized by SCAs as the links between them are weak.

6. The virtual absence of deposit links between SCAs and the FFS implies that the former carry large seasonal idle cash balances on which no interest is earned, while FFIs are denied extra resources for lending during the very period when the liquidity of commercial banks comes under strain.

7. Because increased lending by the FFS will require more resources, savings mobilization must be improved. Among other things, tapping the ideal resources of SCAs might be one way of augmenting the lendable resources of the FFS. As the idle cash balances of SCAs are available for short periods of time, the seven and 30-day call deposit accounts would suit them best, provided the committees that manage SCAs can be persuaded to deposit surplus funds with commercial banks, and provided commercial banks can lower the minimum deposit requirement, currently K1,000. For SCAs that are far away from branches of commercial banks, the development of similar instruments by other FFIs would serve their interests.

Annex

Analysis of main survey data

Excluding refugees, the estimated population of Malawi at the middle of 1989 was 8,021,071. Some 7,135,421, or 89 per cent, lived in rural areas and 893,650, or 11 per cent, lived in urban areas. The total estimated number of households was 1,872,174 made up of 1,659,400 rural households (7,135,421 divided by the average rural household size of 4.3) and 212,774 urban households (893,650 divided by the average urban household size of 4.2).

The names and codes of the areas that were randomly sampled, as well as the number of enumeration areas that were sampled in each, are shown in the schedule below. Since the average size of the population in urban enumeration areas was estimated at 1,353, and that in rural enumeration areas at 942, the urban weight was estimated as:

$$\frac{\text{Average urban population per enumeration area}}{\text{Average rural population per enumeration area}} \times \text{rural weight}$$

$$= \frac{1353}{942} \times \text{rural weight} \quad = 1.44 \times \text{rural weight}$$

With an adjustment for a rural sampling fraction of 5, the rural weight was estimated as:

$$\text{Rural weight} = \frac{\text{Total number of rural enumeration areas}}{\text{Total number of sampled rural enumeration areas}}$$

$$\times \text{ an adjustment for a rural sampling fraction} = \frac{7{,}363}{42} \times 5$$

$$= 175 \times 5 \quad = 875$$

And with an adjustment for an urban sampling fraction of 3, the urban weight was estimated as:

$$\text{Urban weight} = 1.44 \times \frac{\text{Total number of urban enumeration areas}}{\text{Total number of sampled enumeration areas}}$$

$$\times \text{ an adjustment for an urban sampling fraction} = 1.44 \times \frac{635}{46} \times 3$$

$$= 20 \times 3 \quad = 60$$

A. Rural Areas

Area	Code	Number of sampled enumeration areas
Dowa District	11	6
Lilongwe District	12	6
Mangochi District	24	6
Mzimba District	6	6
Nkhata Bay District	7	6
Rumphi District	5	6
Zomba District	21	6

B. Urban Areas

Area	Code	Number of sampled enumeration areas
Blantyre City	20	24
Mangochi Township	23	6
Mponela Township	10	4
Mzimba Boma	3	2
Mzuzu City	1	6
Nkhata Bay Boma	4	2
Rumphi	2	2

To obtain the national estimate for a particular characteristic, the rural sample count was multiplied by 60 and the urban sample count by 875. Urban and rural estimates so found were added together. This approach was used to estimate the number of households that participated in various informal financial activities as lenders, borrowers or savers.

Notes

1. The present study is the second phase of the AERC sub-network on the informal financial sector and is devoted entirely to the issue of linkages between the informal and the formal/semi-formal financial sectors. The first phase of the research investigated the nature, size and role of the informal financial sector in Malawi. The results of that research were published as AERC Research Paper 4 (Chipeta and Mkandawire, 1990).

2. The term informal financial sector refers to economic entities which are involved in mobilizing financial and non-financial resources and/or in lending those resources but which are neither legally licensed or registered, nor directly amenable to control by monetary and financial policy instruments. These entities consist of individuals, associations, non-financial business firms, government and non-governmental organizations. This classification scheme excludes from the definition of the informal financial sector, those financial institutions which are subject to registration or licensing in accordance with appropriate legislation and which are, in addition, amenable to control and regulation by monetary and financial policy instruments. These institutions, which constitute the formal financial sector, in Malawi consist of the central bank, two commercial banks, the building society, the Post Office Savings Bank (POSB), eight insurance and assurance companies, two hire purchase and lease finance companies and one development bank. It also excludes a number of semi-formal financial institutions that are subject to nominal regulation and control even though their businesses are formally registered under the provisions of appropriate statute law. In Malawi these institutions are the credit unions that operate under the direction and control of the Malawi Union of Savings and Credit Co-operatives (MUSCCO), two small development finance companies that serve the small-scale and medium-scale business community, a smallholder agricultural credit fund and a newly established village banking institution catering for the needs of low-income rural households who have no alternative sources of credit.

3. Direct deposit and credit links cannot be conceptualized as competitive or complementary.

4. Some writers are not enthusiastic. To the extent that the IFS and the FFS serve the interests of different types of clientele, the integration of the two sectors may not benefit the weaker (informal) sector of the economy, a sector for which the FFS has not shown much concern (Bouman, 1977).

5. Other lenders that failed to meet the whole demand for informal credit were traders, grain millers, smallholder farmers, and employers. The amounts involved here were not quantified.

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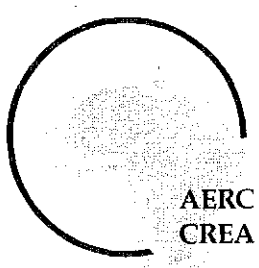

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